



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/648,598

08/25/2003

Hung-Shan Wei

4266

25859 7590 04/04/2008  
WEI TE CHUNG  
FOXCONN INTERNATIONAL, INC.  
1650 MEMOREX DRIVE  
SANTA CLARA, CA 95050

EXAMINER

KARDOS, NEIL R

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

04/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,598	<b>Applicant(s)</b> WEI, HUNG-SHAN	
	<b>Examiner</b> Neil R. Kardos	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

This is a final Office action on the merits.

Claims 1, 7, and 9 have been amended.

Claims 5-6 have been cancelled.

Claims 10-13 have been added.

Currently, claims 1-4 and 7-13 are pending and have been examined.

***Remarks***

**Claim Objections**

Applicant's amendment to claim 9 is sufficient to overcome the typographical error objection raised in paragraph 2 of the previous office action.

***Response to Arguments***

Applicant's arguments with respect to claims 1-4, and 7-13 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 12 recite wherein manufacturing order adjusting instructions comprise an instruction of reclaiming a manufacturing order, an instruction of canceling a manufacturing order, and an instruction of changing a manufacturing order. Applicant's use of the word "and" makes it unclear how all of these instructions (reclaiming, canceling, and changing) can be present at once. Examiner interprets this claim to mean that any one of these instructions can be input, although not simultaneously as claimed.

It is also unclear what is meant by "reclaiming" a manufacturing order. One of ordinary skill in the art at the time the invention was made would not know the meaning of reclaiming a manufacturing order. For examination purposes, examiner interprets this limitation to mean that a cancelled order has been restored.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent number 4,646,238 to Carlson, Jr. et al ("Carlson") in view of Official Notice.

Claim 1: Carlson discloses a system for balancing manufacturing orders, the system comprising an order adjusting module, an order balancing module, a yield gathering module and a document updating module, wherein:

- the yield gathering module is used to gather production yields (see column 4: lines 51-61, disclosing storing expected output results from production testing; column 5: lines 8-42; column 6: lines 24-30);
- the order balancing module is used to balance manufacturing orders in accordance with daily production yield gathering by the yield gathering module, and generate a temporary record for recording data on changing of manufacturing orders (see id.; column 4: lines 15-26; column 8: lines 3-8; column 10: lines 47-67; column 11: lines 13-37);
- the order adjusting module is used to receive manufacturing order adjusting instructions from a user, and add the manufacturing order adjusting instructions into the temporary record (see id.); and
- the document updating module is used to update data stored in a master list of manufacturing orders, detailed records of manufacturing orders, and corresponding planning bills of material (BOMs) in accordance with the temporary record generated by the order balancing module (see column 5: line 57 through column 6: line 23; column 7: lines 5-21; column 7: line 34 through column 8: line 8).

Carlson does not explicitly disclose wherein the production yields are gathered from data stored in daily production statements and daily stock receipt statements.

Examiner takes Official Notice that it was well-known in the manufacturing arts at the time the invention was made to gather throughput and yield data from a variety of sources, including production statements and stock receipts.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to gather the yield data disclosed by Carlson using well-known manufacturing techniques. One of ordinary skill in the art would have been motivated to do so for the benefit of increased accuracy in the yield data.

Claim 2: Carlson discloses wherein the order adjusting module, the order balancing module, the yield gathering module and the document updating module are comprised in an application server (see e.g. column 1: lines 9-13, disclosing the invention of Carlson in a computerized system).

Claim 3: Carlson discloses a database connecting module which connects the order adjusting module, the order balancing module, the yield gathering module and the document updating module with the master list of manufacturing orders, the detailed records of manufacturing orders and the planning BOMs for data interchange therebetween (see column 4: lines 15-26; column 5: lines 8-42; column 5: line 57 through column 6: line 35; column 6: line 53 through column 7: line 21; column 7: lines 34-62; column 8: lines 40-56).

Claim 4: Carlson discloses wherein the master list of manufacturing orders, the detailed records of manufacturing orders and the planning BOMs are comprised in a database server with a database managing module (see id.).

Claims 7& 9: Carlson discloses a method and system with means for (see column 1: lines 9-13) balancing manufacturing orders, the method comprising the steps of:

- gathering daily yields (see column 4: lines 51-61, disclosing storing expected output results from production testing; column 5: lines 8-42; column 6: lines 24-30);

- balancing manufacturing orders in accordance with quantities of products, comprising the steps of:
  - generating a temporary record for recording data on changing of manufacturing orders (see id.; column 4: lines 15-26; column 8: lines 3-8; column 10: lines 47-67; column 11: lines 13-37);
  - receiving manufacturing order adjusting instructions from a user (see id.); and
  - adding the manufacturing order adjusting instructions into the temporary record (see id.);
- deducting data on quantities of materials stored in planning bills of materials (BOMs) of corresponding manufacturing orders from data stored in a record of shop floor depot, and updating storage data on the products (see column 7: lines 5-12; column 7: lines 34-62; column 8: lines 40-56; column 9: line 3 through column 10: line 29); and
- updating data stored in a master list of manufacturing orders, a corresponding detailed record of a manufacturing order, and a corresponding planning BOM in accordance with the temporary record (see column 5: line 57 through column 6: line 23; column 7: lines 5-21; column 7: line 34 through column 8: line 8).

Carlson does not explicitly disclose wherein the production yields are gathered from data stored in daily production statements and daily stock receipt statements.

Examiner takes Official Notice that it was well-known in the manufacturing arts at the time the invention was made to gather throughput and yield data from a variety of sources, including production statements and stock receipts.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to gather the yield data disclosed by Carlson using well-known manufacturing techniques. One of ordinary skill in the art would have been motivated to do so for the benefit of increased accuracy in the yield data.

Claim 8: Carlson discloses adjusting manufacturing orders (see column 4: lines 15-26 and 51-61; column 5: lines 8-42; column 6: lines 24-30; column 8: lines 3-8; column 10: lines 47-67; column 11: lines 13-37).

Claims 10 & 12: Carlson discloses a system and method wherein the manufacturing order adjusting instructions comprise an instruction of reclaiming a manufacturing order, an instruction of canceling a manufacturing order, and an instruction of changing a manufacturing order (see column 7: lines 59-62; column 8: lines 3-8; columns 9-10; column 11: lines 13-37).

Claims 11 & 13: Carlson discloses a system and method wherein the document updating module is used to update a status of the master list of manufacturing orders (see column 2: lines 32-40; column 5: lines 36-42 and line 57 through column 6: line 6; column 7: lines 5-33).



***Additional Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent number 6,119,102 to Rush et al, directed to an MRP system.

U.S. Patent number 6,766,278 to Liu et al, directed to monitoring production.

U.S. pre-grant publication number 2004/0267396 to Coppola et al, directed to integrating rework operations into an advanced planning process.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos  
Examiner  
Art Unit 3623

NRK  
3/20/08

/Beth Van Doren/  
Primary Examiner, Art Unit 3623